

**What is claimed is:**

1. An apparatus for testing performance of a mobile station having a global positioning system function, comprising:

a test block and a test user interface for testing a performance of the mobile station, wherein apparatus tests the performance by operating the test block driven through the test user interface.

2. The apparatus of claim 1, further comprising:

a radio frequency (RF)/intermediate frequency (IF) block for converting GPS (Global Positioning System) RF (radio frequency) signal and the CDMA (Code Division Multiple Access) RF(radio frequency) signal to intermediate frequency/baseband signals;

a keypad/display for inputting a user test command from a user thereon and displaying a test result respectively;

a GPS (Global Positioning System) search block for generating status information of the mobile station by using the baseband signals, an acquisition assistance (AA) data message, and a sensitivity assistance (SA) data message from the test block;

the test block for generating the acquisition assistance (AA) data message and the sensitivity assistance (SA) data message with a first test command from the test user

Interface operated on the keypad or through a diagnostic monitoring device, generating a second test command for controlling the GPS search block by using the status information, and generating test status information based on the test result;

the test user interface operated by the user on the keypad or through the diagnostic monitoring device and transferring the test status information to the display or the diagnostic monitoring device.

3. The apparatus of claim 2, wherein the test user interface is operated as one of a sensitivity test mode, a GPS (Global Positioning System) signal to noise ratio/Doppler estimation test mode, a time calibration test mode, and a setting mode for setting circumstance of the test modes.

4. The apparatus of claim 2, wherein the test user interface is included on a test mode menu list which an usual user does not access.

5. The apparatus of claim 2, further comprising the diagnostic monitoring device if the mobile station is located in a shield box.

6. A method for testing performance of a mobile station having a global positioning system function, comprising:

setting set values according to a test type by an input through a keypad of the mobile station;

if an idle mode is in an off state, entering a traffic state;

if a currently proceeding test is for the first time, controlling a start of a global positioning system (GPS) operation;

sending the acquisition assist (AA) data message and counting a number of tests in a first state;

performing a pilot phase measurement (PPM) search operation and a global positioning system (GPS) search operation using the AA data message and a sensitivity assist data message in a second state;

repeatedly testing each test item of the performance by using the performed result in a predetermined number of the tests; and

displaying the repeated test results.

7. The method of claim 6, further comprising the steps of:

judging if a test mode is "use\_sa == no sa" after the AA data message is sent, if not, and driving a timer for receiving the SA data message; and

if the test mode is "use\_sa == no sa", performing the PPM search operation and the GPS search operation.

8. The method of claim 6, wherein the test item is one of a sensitivity, C/NO and Doppler estimation (CnO/Dopp), and time measurement (Tcal).

9. The method of claim 6, wherein in case of testing the sensitivity, the present mode is changed to a GPS continuous mode to proceed the performance test, a rate of success  $s$  is continuously updated ( $s=m/n*100$ ) as the number  $n$  of proceedings and the number  $m$  of successes are simultaneously counted, and the updated rate of success is displayed.

10. The method of claim 6, wherein the AA and SA data messages are defined by an IS801 protocol.